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Video Self-Modeling

Teresa Lyons, M.S. Ed
VT/TTAC

Imagine an approach to teaching children with autism that develops language, behavior, social-communication, functional and motor skills that incorporates video of the child performing these skills successfully? How could such an approach be successful if the child is not currently performing the skills? With a well-researched approach known as video self-modeling (VSM), a child with autism can view himself or herself in video as he or she could be in the future. This approach allows a child to view only positive performances of a behavior or skill and thereby increases the child's ability to perform the skill. Skills being targeted may not yet be in the child's repertoire. As a result of much research, video self-modeling is considered to meet the criteria for designation as an evidence-based practice for educating children with autism spectrum disorders (Bellini & Akullian, 2007).

Forty years ago Albert Bandura introduced the idea of self-efficacy – the idea that "a person has a greater chance of learning a behavior and gaining a perception of self-competence, when s/he perceives a greater chance of success or self-efficacy (Whitlow, p. 4)." From this idea emerged two of four methods by which self-efficacy can be increased. Two of the four methods will be discussed in this article.

The first method is one that we are more familiar with, as it lends itself to why inclusive practices are effective in educating children with disabilities. This first method of increasing self-efficacy is called vicarious experience. The method proposes that a child will increase in his ability to perform a skill or set of skills by viewing a model performing the skill. The best models, according to Bandura, are those that most closely resemble the child viewing the performance.

The second method of increasing self-efficacy is called enactive experience. In this method, the child would actually see himself perform a learned behavior successfully. "Self-competence is proven through self-performance (Whitlow, p.4)."

As a result of these theories proposed by Bandura, there emerged a body of research that has looked at both the idea of videotaping peers performing skills and videos of the child performing skills. Much research has emerged in the past few years related to video self-modeling and autism.

The practice of producing a video self-model is one that is easily available to educators in this age of digital cameras and simple video editing software packages available on most home/school computers. The process of gaining footage to create the video self-model can occur in one of three ways:

- For a child who is able to role-play, have him role play behaviors with prompts and supports (if needed) being

provided outside of the lens of the camera. This works well for students who are more verbal and for social-communication and behavior skills;

- For a child who needs a lot of prompting (physical, gestural, verbal), videotape the child with the supports in place but bring the lens closer to the child thereby excluding the hidden supports. This works well for motor skills in which physical support may be needed;

- For a child who exhibits the behaviors/skills needing to be videotaped less frequently, take continuous video of the child over several days.

No matter which approach is taken to video taping, the editing process is what will determine the quality of the finished product. After videotaping, the video should be edited so that only the positive performances are available for the child to view. For each skill, in particular motor skills, the child needs to see himself performing the skill as a complete process and as having completed it successfully.

After editing the video, the total length should be no more than three minutes long. The video can start with a trailer such as "Let's watch Tom greet his friends." It can end with "Great job greeting your friends Tom" and the sound of hands clapping. The child then views the video on a schedule that is appropriate to the skill. If the skill being targeted is greeting friends, Tom may need to watch the video prior to going to lunch in the cafeteria.

As with any intervention, data should be taken before intervention, during intervention, and after intervention to determine if it has helped change or improve the skills targeted. The most fascinating effects that have been documented in research about this approach are that the treatment length is usually minimal with some students acquiring the skills within a few days of intervention. In the meta-analysis of research on VSM conducted by Bellini and Akullian (2007), they reported that the mean length of intervention was nine and a half sessions. Besides immediate skill acquisition in many cases, skills were maintained over time and were generalized across persons and settings.

Temple Grandin says, "I think in pictures. Words are like a second language to me. I translate both spoken and written words into full-color movie, complete with sound, which run like a VCR tape in my head. When somebody speaks to me, his words are instantly translated into pictures (Grandin, 1995, p. 1)." When we produce a video self-model for a child with autism, we are translating skills that may not be completely in a child's repertoire into a "full-color movie" (Grandin, 1995, p. 1) with the anticipated outcome being greater self-competence leading to greater skill acquisition.

For more information on this approach to educating children with autism, see research listed below:

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist.* 37(2), 122-147.

Bellini, S. & Akullian, J. (2007). A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with autism spectrum disorders. *Exceptional Children*, 73(3), 264-287.

Buggey, T. (2005). Video self-modeling applications with students with autism spectrum disorder in a small private school setting. *Focus on Autism and other Developmental Disabilities*, 20(1), 52-63.

Grandin, T. (1995). *Thinking in pictures*. New York: Doubleday.

Wert, B. Y. & Neisworth, J. T. (2003). Effects of video self-modeling on spontaneous requesting in children with autism. *Journal of Positive Behavior Interventions*, 5(1), 30-34.

Whitlow, C. (n.d.) Video Self-Modeling as an intervention with a preschooler with language delays. (*Proceedings submission, The University of Tennessee at Martin*). Retrieved March 19, 2007 from http://www.hiceducation.org/Edu_Proceedings/Crystal%20K.%20Whitlow.pdf.

Regions 1 & 8 T/TAC at VCU
Sue Palko palkosm@vcu.edu
Linda Oggel lsoggel@vcu.edu

Regions 2 & 3 T/TAC at ODU
Jennifer Mitchell jmitchell@ttac.odu.edu
Kelly Koons kkoons@odu.edu

Region 4 T/TAC at GMU
Karen Berlin kberlin@gmu.edu
Kris Ganley kganley@gmu.edu

Region 5 T/TAC at JMU
Sally Chappel chappesl@jmu.edu
Teresa Cogar cogartl@jmu.edu

Regions 6 & 7 T/TAC at VT
Teresa Lyons lyonst@vt.edu
Diann Eaton dweaton@vt.edu

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